

Meeting 3/16/05 SRC Subcommittee on Laser Safety

Present: Joel Ager (MSD), Ted de Castro (EHS), Marc Hertlein (CSD), Richard Kadel (PHNSD), Larry McLouth (EHS), Robert Schoenlein (MSD), Ed Ciprazo (UCB), Neil Landau DOE/BSO

Agenda:

- (1) Proposed amendments to Pub3000 Ch 16 – Lasers (Appendix B) (All)
 - a. How do we envision these guidelines being applied?
- (2) Discussion of DOE Special Operations Report: Laser Safety (Ted, all)
- (3) Update on DOE laser safety advisory committee (Ken)
- (4) Update on Int'l Laser Safety Conference (Ken, Larry)
- (5) Update on LSO lab visits (Ted)
- (6) Plan for re-review of all laser AHD's (Ted)
- (7) Update on FY05-06 Laser Safety Objectives (Gary, Ted)
- (8) Outstanding issues:
 - a. Vendor alignment of lasers
 - b. Who must be included on laser AHD's (re: ALS)

Minutes:

- (1) Considerable discussion of Appendix B of the Laser Safety section of Pub3000

The current policy and proposed revision are as follows:

Current Policy: Pub3000, Ch16, Appendix B, pg. 3

Eyewear

Laser Protective Eyewear must be worn whenever there is an open beam anywhere in the room (this of course includes during alignment). You must wear laser protective eyewear to view diffuse reflections from viewing devices.

Proposed Revised Policy: Pub3000, Ch16, Appendix B, pg. 3

Appropriate laser protective eyewear MUST be worn by all persons within the Nominal Hazard Zone (NHZ) whenever there is an open Class 3B or Class 4 beam. The NHZ is considered to be the entire room or lab in which the laser is located unless otherwise specified in the AHD. Violation of this policy is cause for a STOP WORK action.

ANYONE witnessing a violation of this policy has the right and the obligation to initiate a STOP WORK action and report it to the LSO and division management.

The primary issue discussed was whether the following additional statement should be included in the revision:

There are no conditions warranting exception to this policy.

No consensus on this was reached, and this issue will be taken up at the next meeting.

A second issue regarding this section of Pub 3000 was raised, specifically the second sentence of the “Eyewear” paragraph referring to the viewing of diffuse reflections. Ted DeCastro will take a look at this and propose something consistent with the rest of the “Eyewear” paragraph. An additional issue was raised regarding this section of Pub 3000, Ch16, Appendix B, pg. 1

Initial Considerations

Persons conducting the alignment have been authorized by the PI and are listed in this AHD.

This needs to be modified to allow for alignment by personnel not listed in the AHD but under the direct supervision of an authorized (AHD-listed) person.

Finally, there was considerable discussion regarding how this policy would be implemented – specifically how the NHZ would be determined for individual laboratories under changing circumstances, barrier/enclosure arrangements etc. Ted’s plan is to deal with this on a case by case basis, through discussion with the laser user, and to have this documented in the AHD.

(2) DOE Special Operation Report – Neil Landau reported that DOE/SC and the individual laboratories will be establishing safety and performance expectations. Written reports from the labs documenting these expectations and performance metrics are expected May 20. Further details will be forthcoming.

(3) DOE Laser Safety Advisory Committee – item tabled in Ken’s absence.

(4) Int’l Laser Safety Conference – report from Larry and Ed. At present, laser safety relies largely on personal responsibility. The main challenge is to get laser users to accept this responsibility, to follow laser safety alignment guidelines and use appropriate eyewear. In general there are very few qualified LSOs relative to the number of laser users. As a result of this, laser training tends to be rather generic. It was suggested that the current LSO lab visits be done on a regular basis, partly as a means of providing more specific training to users (see agenda item 6)

(5) LSO Lab Visits are going well. 16 labs have been completed so far, with the goal of visiting all ~40 labs at LBNL by the end of April. We need to find a way to extend these visits to campus labs where LBNL employees are working. In principle, Ted could visit these labs at the invitation of UCB LSO Ed Ciprazo. This remains an open issue, but one that needs to be addressed since safety issues involving LBNL personnel are LBNL responsibly, even if they involve work done on campus.

(6) AHDs that have not been changed in a “significant” way are presently renewed without EH&S review. While Ted has specified to the Divisions what he considers to be “significant” changes, a situation still exists in which AHDs can change over time without regular EH&S

review. It was proposed that all AHDs undergo a mandatory review every three years. It was further proposed to require an LSO training meeting (with the entire group) as a requirement for renewing the AHD. This is intended as a means of insuring that each group gets some individualized training on a regular basis.

(7) no formal update on the chart of FY05-06 Laser Safety Objectives

(8) Vendor Alignment of Lasers – apparently LBNL Procurement has a policy that requires a safety procedure, liability insurance etc. from vendors. We need to find out exactly what the policy is and how/if it is enforced when purchase orders and laser repair request are placed.

Action Items:

(1) Proposed updates to Pub 3000 (Ch16, Appendix B) – see (Agenda Item 1 above) – Ted

(2) Revision to Pub 3000 requiring LSO review of laser AHDs and LSO training visit every three years. – Ted.

Get input from John Seabury - Bob

(3) Inclusion of ALS beamline users on laser AHDs – get info from ALS on this - Bob